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The Peace Corps and Higher Education
Two Years of Partnership

ROGERS B. FINCH

Africa's Challenge to American Higher Education

C. KENNETH SNYDER

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE—Office of Education

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The Peace Corps and Higher Education— Two Years of Partnership

By ROGERS B. FINCH *

ON MARCH 1, 1961, President Kennedy announced that the United States was establishing a Peace Corps, a body of volunteers willing and qualified to serve abroad to help the people of other lands to meet their growing needs for skilled manpower and to help promote mutual understanding in the interest of peace and friendship. In his message to the Congress, he emphasized the importance of our colleges and universities in the success of such an undertaking and stated that the Peace Corps would give major emphasis to developing a close partnership with the educational community.

At the start of the third year of the Peace Corps' existence, it is timely to examine the relationships which have developed and their future implications, both for the colleges and universities and for the Peace Corps. After launching its initial projects in the spring and summer of 1961, the Peace Corps made basic decisions which bear directly on those relationships.

1. Each college and university interested in cooperating with the Peace Corps would be encouraged to designate a member of its staff as a Peace Corps liaison representative. This would establish a single channel for liaison with the Peace Corps' Division of Colleges and Universities, Office of Public Affairs, to bring opportunities for Peace Corps service to the attention of students, staff, and alumni.

2. Selection of applicants for individual projects would be made on a nationwide basis, with equal opportunity for all, by the Division of Selection. Standards of selection would be developed through experience and policy.

3. Invited applicants would be trained by selected colleges, universities, and other qualified organizations under contracts meeting criteria developed by the Division of Training and in close cooperation with the Peace Corps.

4. Evaluation and selection of applicants would continue during the training period with the advice and participation of the training organization's staff.

5. Within the limitation of funds and individual country situations, cooperation with the project would be extended overseas under contract with selected colleges and universities. The decision to make such an extension would be based primarily on the need for technical and personal counseling of the Volunteers which could not or should not otherwise be provided by the Peace Corps oversea staff.

6. A Peace Corps representative would be placed in each country in which the Corps was operating. He would be supported by an adequate staff to enable him to carry out his responsibilities for all Peace Corps operations in the country.

7. Within legislative limitations, the Peace Corps would inform the returning Volunteers about the opportunities available to them in higher education

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Dr. Finch received his bachelor's, master's, and doctor's degrees from the Massachusetts Institute of Technology where he also served as an assistant professor from 1946 to 1953. He was director of the U.S. special technical and economic mission to Burma under the point 4 program in 1953 and 1954. He was with the Rensselaer Polytechnic Institute from 1954 to 1961 as assistant director and then director of the research division, and as associate dean of the School of Science. He also served as special consultant to the Mutual Security Agency in 1952 and to the Ford Foundation in 1960. He is currently associate dean of Rensselaer Polytechnic Institute of Connecticut, Hartford Graduate Center, East Windsor Hill, Conn.

or in employment in government or private international career service.

8. Research on various phases of Peace Corps operations would be conducted under contract by qualified organizations in order to provide a scientific basis for refinement and improvement of those operations.

Colleges and universities have responded enthusiastically to the opportunity to cooperate with the Peace Corps in all of its activities. Most institutions have designated as liaison representatives staff members who are personally enthusiastic about the Peace Corps and are devoting considerable time to bringing the Peace Corps story to the student body. The results have been and continue to be most gratifying. The initial response to such a new and exciting program was not just a phenomenon of the first year of the Peace Corps. Interest has continued to grow and applications from students have increased in number. Those of us who frequently visit campuses are impressed by that significant minority of highly motivated students who see the Peace Corps as an opportunity to put their idealism into practice.

These eager idealists, however, must face a severe screening process before they can expect to arrive in Sierra Leone, Brazil, Sarawak, Afghanistan, or any of the 45 countries in which the Peace Corps is now operating. Like the 5,000 Volunteers now serving overseas who were selected from over 30,000 initial applicants, they will have their applications carefully reviewed by trained and experienced staff members of the Division of Selection. In analyzing their questionnaires and the all-important references obtained from at least six persons who are well-acquainted with them, the screening officers will look for evidence of essential personal qualities. Emotional stability, good health, maturity, initiative, perseverance, leadership ability, high motivation, and a desire to work with others are the qualities sought.

Corps officers will combine the records of applicants with reports of the evaluation of their abilities as revealed from their questionnaires and the Placement Tests, and match them against the personnel requirements of the various project requests which continually flow from the host countries. Invitations will then be sent to these applicants to report to the college or university which the Peace Corps Division of Training has selected to conduct their training.

The objective of this training period is twofold: to prepare them for their oversea assignments and to eliminate those who are judged to be unsuitable for oversea service under the conditions which Volunteers must face. The latter is conducted by a Selection Board, composed of staff of the Peace Corps and faculty of the institutions conducting training. Eighty-two percent of the applicants who have entered training programs have become Volunteers; the others were either selected out by the Board for a number of reasons, including medical, or they resigned. The fact that this figure is as low as it is speaks well for the effectiveness of the selection and training process.

Effective preparation is an essential ingredient in the formula for effective oversea service. Experimentation with various training methods has resulted in a more or less standard approach to training. The Peace Corps selects training institutions on the basis of a number of criteria, both quantitative and qualitative. In such a rapidly moving operation as the Peace Corps, time for decision is often short. A combination of factors contributes to this situation, but to date longer range planning has not been possible. It is a tribute to the flexibility and understanding of the 55 colleges and universities with which the Peace Corps has worked thus far that the training of the 5,000 Volunteers now serving overseas was accomplished effectively and on schedule.

Institutions which have conducted Peace Corps training projects have found the experience to be not only highly demanding of staff and facilities, but also exciting and rewarding. The opportunity to teach international relations, area studies, country studies, language, American studies, health, technical studies, and Communist tactics and techniques to a group of highly motivated trainees who will shortly be putting to use what they have learned has proved to be a new and exciting educational experience for faculty members who have participated in these programs. Training institutions have frequently had to borrow faculty from other institutions in order to meet the teaching requirements of the program. As an experience in interdisciplinary cooperation with a single, well-defined objective, the conduct of a Peace Corps training project has also begun to have an impact on the regular curriculums. Institutions which have conducted these programs report an expanded interest

by their students in preparing for international service careers and for the Peace Corps in particular.

Looking ahead to an expanding but concentrated program, the Peace Corps has established a year-round program under contract with the University of New Mexico for the training of all Volunteers who will be engaged in community action projects in Latin America. This not only insures a steady flow of trained Volunteers but also makes it possible for the institution to commit appropriate facilities and staff, with a substantial savings in cost to the Peace Corps. It also provides for the more efficient utilization of scarce foreign area and language specialists and facilities.

Although the entering trainees are interested primarily in their immediate training and oversea service, a survey has shown that over 60 percent of those now overseas desire to return for additional higher education, mostly at the graduate level. A few enterprising Volunteers have made arrangements with faculty members at their training institutions or others to undertake correspondence or independent study for credit while serving overseas. Those who arrived without making such arrangements in advance have found, however, that such programs have become very difficult to work out. In the few cases where Volunteers are serving overseas in projects with which the training institution maintains continuity under contract with the Peace Corps, positive arrangements are made during the training period for the Volunteers to enroll as registered students of the institution so that they may take advantage of the special educational opportunities which the institution offers. The presence of a faculty member with them overseas during their terms of service also satisfies most institutions' requirements for residence and academic supervision.

The lengthening of the basic training period to 12 weeks has also made it possible for training institutions to consider the granting of appropriate academic credit for those parts of the training program which meet normal academic standards. Some institutions have done so, but others, because of academic policy, are either unwilling or cannot. However, all training institutions are encouraged to record the academic performance of all trainees as a matter of permanent record. When the Volunteer returns from oversea service, these records will be useful either to an institution to which the Volunteer has applied for further education or to a prospective employer.

The Peace Corps has asked some institutions to administer certain projects under the general supervision of the Peace Corps representative in those countries. These institutions are in a better position than the Peace Corps to provide needed specialists' assistance which is beyond the capabilities of the nonspecialist Peace Corps staff. In general, the Peace Corps does not desire to expand its direct-hire staff overseas by addition of technical specialists. Although such personnel could be employed under personal contracts, obtaining them under contract with colleges and universities makes it possible to take advantage of the full resources of the institution for the benefit of the Peace Corps Volunteers as well as the institutions themselves. Other institutions now have an excellent opportunity to evaluate the possibilities of administering oversea projects, since the first of these 2-year contracts have almost reached completion and final reports from the original institutions should be soon forthcoming.

The year-round training program at the University of New Mexico introduces an additional complication. Few institutions have shown an interest in operating the oversea phase of a project for which some other institution conducted the training. There is, therefore, an opportunity for oversea operation of projects, in cooperation with the training institution, by institutions which are unable or unqualified to train the Volunteers for that project. As an example, San Jose State College is supporting the secondary school mathematics and science teacher project in the Philippines, although the Volunteers were trained at San Francisco State College. Notre Dame University, on behalf of the Indiana Conference on Higher Education, is managing projects in Chile for which Volunteers were trained on its own campus as well as at Purdue University.

Institutions cooperating in such projects overseas can offer Volunteers the opportunity to continue their education in anticipation of their return to the United States. An outstanding example of these benefits is The Ohio University project for secondary school teachers in Cameroon. During the training period, the university counseled Volunteers as to their interests and needs. As in other teaching projects, the majority of the Ohio trainees have not had specific teacher preparation or prior teaching ex-

perience. Many desire to enter the teaching profession on their return to the United States, although they had not been interested in such a career before entering the Peace Corps. And a number of boards of education across the country have made inquiries to the Peace Corps concerning their availability. Others wish to pursue advanced degree work in other fields upon returning to the United States. The minority who are already professionally qualified teachers by U.S. certification standards wish to take advantage of the educational opportunities for advancement in their profession.

Ohio University's program makes it possible for a Volunteer who was trained at that institution to enroll for an undergraduate sequence of courses preliminary to student teaching to be taken by correspondence while the Volunteer is overseas. His teaching experience overseas, under the supervision and advice of a professor of education from The Ohio University resident in Cameroon during the life of the project, can then be given recognition for academic credit for student teaching.

The first 3 credit-hours are paid for by the Volunteer, but subsequent credit-hours are supported by The Ohio University on a tuition-free scholarship basis. This makes it possible for a Volunteer to acquire sufficient academic credits overseas to meet teaching certification requirements in most States on his return. Other Volunteers can pursue other academic programs with full cooperation of The Ohio University home faculty and earn up to 12 credit-hours in addition to student teaching credit.

In the early oversea contract programs, the choice of the university oversea representative was left primarily to the institution. In an endeavor to effectively fulfill the responsibilities charged to it by the Congress, the Peace Corps adopted special policies concerning the personal qualities of its oversea representatives, their language abilities, and the level of living they should exemplify overseas. In order to implement these policies fully, the Peace Corps later required that nominees of institutions for oversea representatives be interviewed by the Washington staff and finally approved by the Peace Corps Director. The special personal qualities desired as well as the limitations placed on salaries and benefits have made it increasingly difficult for institutions to obtain approval of nominees from their own campuses. In one instance four nominees from one institution were successively turned down, leaving the institution with a well-developed program but no way to provide oversea continuity through an oversea representative. Some institutions have, as a result, found it necessary to recruit from outside their own faculties in order to obtain a nominee acceptable to the Peace Corps. This is less than ideal and, in some cases, has resulted in a reduction or elimination of the educational benefits which could be made available to the Volunteers. On the other hand, experience has shown that it is better for the Peace Corps to sacrifice a well-developed educational plan than to compromise on the qualities of the oversea representatives. There is ample evidence that success of oversea projects is directly related to the caliber of the Peace Corps representative and his direct-hire and contract staff.

In the host country, the university representative serves under the general supervision of the Peace Corps representative. This may at times call for his willingness to serve as motor pool manager, allowances paymaster, mail courier, or even acting Peace Corps representative. In addition, he is expected to provide technical and personal counseling to Volunteers who need it, and to assist them in obtaining materials and equipment they need to carry out their work. In one case, a Volunteer was unexpectedly called upon to teach high school economics. The university representative cabled his home campus and within 72 hours the Volunteer received a complete correspondence course in economics at the level he required for teaching. He met his first class several days later and, at last report, was doing an outstanding job.

The reasons why institutions wish to become involved in this type of program are many, but chief among them is the opportunity to serve the educational objective of developing their programs in international education. While participation in a training project makes some contribution to this objective, continuity with the project overseas enables the institution to strengthen itself through evaluation of the project and through the experience gained by its oversea representative. The prospect of Volunteers returning for additional graduate work and eventual consideration as faculty members has been viewed as a new opportunity to meet the need for personnel with oversea experience to carry out this objective. A large number of institutions have already offered scholarships, fellowships, and assist-

(*Continued on p. 26*)

Africa's Challenge to American Higher Education

By C. KENNETH SNYDER *

Any views expressed in this article are those of the author. They should not be interpreted as reflecting the official opinion or policy of any branch of the United States Government.

THE CHALLENGE to American universities and colleges which one finds today in modern Africa is not entirely new. It has been sitting on the American doorstep for some years. But its dimensions as well as its urgency received sharp definition when the problems of African higher education were given intensive attention during a UNESCO conference held at Tananarive, Madagascar, September 3–12, 1962.

This conference took organization form in 1961 when UNESCO's General Conference adopted Resolution 1.14. The Tananarive Conference, however, represented a logical followup to the Addis Ababa Conference on African Education of May 1961, when the majority of newly independent states of sub-Sahara Africa approved a massive and imaginative 20-year program of educational development designed to help lead their countries on to new plateaus of national existence.

Addis Ababa representatives recognized that within this program more detailed attention would have to be given to various priority needs in African education. Initial planning for the Tananarive meetings was begun, therefore, at an early date. Two preliminary studies were undertaken in fields of highest priority: the staffing and financing of institutions of higher education. The first, under the chairmanship of Sir Alexander Carr Saunders of Great Britain and supported by a Carnegie Corporation grant to the United Kingdom's Inter-University Council, concentrated on staffing problems and needs. The second, conducted by the Netherlands Economic Institute under the direction of Prof. Jan Tinbergen, was made possible through financial assistance of the Ford Foundation. At the same time, UNESCO requested a number of African university principals, staff members, and Secretariat officials to prepare studies in four specific areas of curriculum reform: Economic development, public administration, natural resources, and African studies.

In both the staffing and financial studies, Carr Saunders and his research associates and Tinbergen and his staff enjoyed European and American cooperation, the latter through the agency of the Africa Liaison Committee of the American Council on Education. The study by Professor Tinbergen and the Netherlands Economic Institute falls outside the purview of this paper, but it is concerned primarily with budgeting and costing of African higher education, particularly with the relationships of higher education financing to national budgets, economic growth, and African requirements for manpower and human resource development. Together, these preparatory efforts provided Tananarive delegates with basic papers and reflected a number of trends within African educational activity which have come to characterize the emergence of the modern African state: (1) UNESCO's expanding, important, and coordinating role in educational development; (2) the major contributions of private institutes and foundations to the growth of educational institutions; (3) the complex and interrelated character of multilateral and bilateral aid to educational, economic, and human resource problems; and (4) the political significance of the international conference as a method of stimulating expectations to heights which, while salutary and attainable, may, in the long run, prove unattainable simply because the combination of bilateral and multilateral aid needed is so cumbersome to administer and organize.

Within this complex of the politics of international educational affairs, the Tananarive Conference

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summarized astutely the pressing problems of African higher education relating to staffing, financing, and curriculum reform. These problems are coming into sharp focus at the time U.S. universities and colleges are confronted with similar issues. It is the first—that of staffing—which is the major concern of this study.

It was estimated not long ago that U.S. universities and colleges would need to increase faculty and administrative staff from 232,000 to 320,000 between 1960 and 1970. This increase would cost nearly $3 billion more than current annual expenditures.[1] Against this American projection, the Tananarive Conference established a 20-year goal for African universities, 1960 to 1980, designed to attract some 21,000 faculty staff and administrative members with total expenditures (staff plus buildings, administrative services, equipment, student housing, and libraries) estimated at $97.7 million by 1965, $170.6 million by 1970, and $533.7 million by 1980.[2]

As one studies these two projections, a central question arises: Can U.S. universities and colleges, facing pressing staff needs during the next decade, make any significant contribution to Africa's massive staff requirements in higher education? Any answer suggests a need to review the Tananarive Conference recommendations, the definition of the role of the university in Africa's future development, the current state of African universities, current U.S. contributions to African university staff needs, and U.S. recruitment and supply mechanisms for sending U.S. professors and administrative staff to foreign assignments.

Conference Recommendations: Summary

Conclusions of UNESCO educational conferences are not binding upon participating states and organizations. Rather, conference decisions usually take the form of recommendations to the following UNESCO General Conference or, in the case of specific items dealing with the Addis Ababa Plan for African Education, to the organization of African Ministers of Education, which meets regularly every 2 years.[3] In addition, member states of UNESCO, specialized agencies of the United Nations, public and private international organizations and foundations are urged to study specific recommendations falling under their areas of competence and authority.

The final report of the Tananarive Conference contained the following recommendations and conclusions which member states and private organizations were asked to consider:

First, that for the 1962–80 period, the Addis Ababa Plan would require an estimated 7,000 expatriate staff members and a stepped-up training and scholarship program designed to attract, train, and appoint 14,000 Africans to the university staff. These needs are for Middle African universities only—those which lie south of the Sahara and north of the Republic of South Africa with the exception of Basutoland. The Carr Saunders study also indicated the pace and timing of African staff needs—a rise from 2,166 faculty teachers in 1961–62 to 4,565 in 1966–67, to 6,185 in 1971–72, and up to 8,485 in 1980–81.[4]

In contrast to these projections, in the 1961–62 school year only 594, or 27 percent, of 2,166 teachers in the university colleges of middle Africa were African. The other 1,572 or 73 percent, were expatriates—702 from Great Britain, 257 from France, 135 from Belgium, 107 from the United States, 50 from India, 48 from South Africa, 29 from Canada, 26 from Australia, 22 from the Netherlands; 19 other countries also made modest contributions.[5]

Second, that observer countries consider seriously the need to establish national agencies as the most effective type of mechanism to support oversea staff recruitment efforts.[6]

Third, that financial assistance from outside sources be provisionally estimated at $140 million dollars for 1961, rising to $400 million by 1965, $920 million by 1970, and falling away to $400 million

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[1] "Ten-Year Objectives in Higher Education Staffing, 1960–61 through 1969–70," *Higher Education*, Vol. 17, No. 6 (February–March 1961), p. 13.

[2] "The Development of Higher Education in Africa": Conclusions and Recommendations of the Conference on the Development of Higher Education in Africa, Tananarive, Sept. 3–12, 1962, *UNESCO Conference Report*, ed. 62/D.20/A (1963), p. 20.

[3] The first such meeting was held in Paris, March 1962; the second is scheduled for Dakar in December 1963. UNESCO serves as the Secretariat for the organization.

[4] Sir Alexander Carr Saunders and Associates, "The Staffing of Higher Education in Africa," UNESCO Conference Paper for the Tananarive Conference on the Development of Higher Education in Africa, Sept. 3–12, 1962.

[5] *Ibid*, p. 17.

[6] *UNESCO Conference Report, op. cit.*, p. 18.

by 1980. However, no commitments were asked for, but non-African countries and private foundations were urged to study the situation.[7]

Fourth, that a goal of 5,000 be set as the minimum number of students per institution and a desired student-staff ratio average of 15–1 for middle Africa (against 20–1 for North Africa); and that Conference delegates pool efforts and resources, practice rigid economies, and concentrate on building up and strengthening 28 existing university institutions and constructing 4 new ones. Against these figures, it should be noted that only 4 Middle African universities presently have enrollments of more than 1,000 students—the University College of Ibadan with 1,225 students, the University of Khartoum with 1,625, the University of Madagascar with 1,129, and the University of Dakar with 1,398.[8] By September 1962, the number had grown to six.

Fifth, that immediate steps be taken to establish a permanent organization of African university heads to enable them to keep each other informed, to discuss topics of common interest, and to define inter-African university standards, the equivalence of diplomas and degrees, and to establish interrelated entrance and admissions requirements. The International Association of Universities, to which this new body is to be affiliated, offered to assist during the organizational period.

Sixth, that the Conference adopt a set of principles to be used to guide international cooperation and assistance and that all aid be based upon specific request, meet the expressed needs of countries and institutions, and conform, where possible, to the principle of mutuality. In addition, the report placed emphasis upon the development of universities within a total national education plan as well as with regard to the utilization and development of regional resources, particularly in such institutions as medical schools, veterinary colleges, and research institutes.

Lastly, that the "Africanization" of higher education be accelerated, notably through a thorough study and revamping of the curriculum. The discussions on this subject centered on the role of universities in African life. This problem, along with staffing needs, dominated all deliberations of the Conference. It is of such significance that one must stop for a moment to analyze the extent to which Africans themselves have gone in recognizing what kind of institutions of higher learning they want and realize they need.

The Role of the University in African Life

The development and the staffing of African universities raise fundamental issues of their precise role in African life. Should they merely perform the traditional and classical functions of the older European universities on which they are modeled? Or should they take on additional and radically different roles which would fit them for greater service to African society?

The mood of Tananarive gave sharp affirmatives to the second question, with Africans themselves vigorously assenting to the thought expressed by F. Cyril James, president of the International Association of Universities, that Africa might well turn for inspiration to the North American experience a century ago in meeting the needs and demands of a frontier and developing society. Dr. James stressed the fact that universities in the New World had usefully combined classics and humanities with the professions and mechanical arts in the tradition of American and Canadian land-grant colleges. These institutions, he pointed out, not only met the large requirements for trained manpower but also became capable of giving academic status to degrees and studies in the mechanical arts while filling the needs for extramural, extension, and adult education.[9] Even the Soviet Union joined the chorus of approval for this classical and practical combination: A. F. Shebanov, dean of the Faculty of Economics and Law at Patrice Lumumba Friendship University in Moscow, suggested that as African institutions develop their own identity and character, they must look to the best "in European, Russian, and American experiences in higher education for help and assistance." [10]

Yet Tananarive deliberations on the role of the

[7] *Ibid.*, p. 21.

[8] Martin L. Kilson, Jr., "Trends in Higher Education," *Africa and the United States, Images and Realities*, Background Book prepared for the 8th National Conference of the U.S. National Commission for UNESCO, Boston, Oct. 22–26, 1961, pp. 63–64.

[9] Commission III Debates, UNESCO Conference on the Development of Higher Education in Africa, Tananarive, Madagascar, Sept. 3–12, 1962.

[10] *Ibid.*

university in African life are worth attention for other reasons than their recommendations on meeting this pragmatic need or the benefits derived from the review of common problems by educators, government officials, international civil servants, and political leaders. The Conference is significant because it gave institutional definition to an African Declaration of Intellectual Independence, through a body of observations most aptly summed up by Davidson Nicol, the able, West African poet-doctor turned educator-statesman. During Commission debates on curriculum reform, Dr. Nicol suggested that what Africans seek now is to establish their own educational and cultural institutions to make it possible for Africa's intellectual independence to catch up to and to keep pace with African political liberation.[11] This sentiment served as a cornerstone for discussions as the Conference turned to more conventional educational problems of curriculum, textbooks, and classroom content.

It is axiomatic, suggested the delegates, that African universities have a responsibility to advance the frontiers of knowledge through teaching and research. These traditional functions are basic to the work of any university, and they form the foundations of intellectual life in any true academic community of scholars and students. The African university cannot afford to deviate radically from this basic pattern without losing its international identity.

No single type of foreign university brought in from the outside can, in itself, meet the aspirations of the African people for social and economic development, the Conference warned. Each country has its own genius and special personality, and its institutions must bear the stamp of its particular characteristics. Hence, in addition to the traditional role of giving a broad liberal education, African universities must reflect the needs of the African world and assist African men and women in acquiring skills that will enable them to participate fully and usefully in the economic, social, and political development of their own continent.

In addition to this academic recognition of regional, national, and even narrow cultural traits, African institutions of higher education have a duty—in a sense, a paradoxical one—to serve as instruments for consolidating national unity. This they can do by resolutely opposing the effects of sterile tribalism and narrow nationalism through admissions policies which ignore ethnic and tribal origins and avoid political and religious discrimination. This means opening the university to all students on the basis of merit, particularly to those who demonstrate capacity to benefit from a university education of internationally accepted academic standards.

In recognizing both the problem of training greater numbers of much-needed manpower and establishing academically sound but wider admissions policies, Africans themselves noted that their institutions of higher learning are much too specialized and with entrance requirements too much restricted. Two Conference decisions bore witness to their concern on both counts: First to concentrate, as soon as practical, on undergraduate education of Africans in Africa except for a few selected fields where facilities were not available; and second, to establish goals of a 15-to-1 student-staff ratio and of 5,000 students as the minimum of an African university. In each instance, hope was tempered with realism; both goals were recognized as long-term goals toward which to strive rather than objectives which could be quickly or easily attained.

Tananarive delegates concluded that one of the main problems of present university education in Africa was its concentration on the study of foreign civilizations, both in subject matter and through the use of imported textbooks. Yet the universal mission of a university is to define the aspirations of the society of which it is a part and which it has been designed to serve. Fundamental purposes of African universities cannot be different. Toward this end, therefore, the African university must begin to establish itself as the cultural center of the community in which it lives and the guardian and proponent of Africa's artistic, literary, cultural, and musical heritage. It must not only provide opportunities for studying African culture and history but become the research center and library depository of that knowledge.

In addition, African institutions of higher learning must involve themselves more fully in the general economic, agricultural, social, and cultural development of African society to further the service which they render to society. They must reach out to the people through extramural departments, research and extension stations, and adult education.

[11] *Ibid.*

In order to perform these tasks effectively, African universities cannot divorce themselves from the political dynamics of the world immediately around them. But in this process, it is mandatory that African universities preserve the principle of academic freedom to the fullest extent possible. They must have liberty to teach, to criticize, to advance the frontiers of knowledge through research and discussion, and to disseminate widely the results of their findings. African universities must protect and reflect these principles and consolidate and defend them whenever it becomes necessary. Implicit in the debates on this point, however, was the tacit admission at times, particularly in one-party states, that the line between pure academic freedom and loyalty to the state was a distinction which could give rise to difficulties, as Africans struggled with the birth pangs of freedom and responsibility.

The Conference acknowledged that the task of establishing and developing adequate facilities for higher education in Africa is of such magnitude that African countries themselves, given their meager financial resources and their present level of economic development, cannot—acting alone—cope with the problem. This means they will have to act cooperatively, and they will require massive international assistance if, by 1980, they are to achieve the goals established at Addis Ababa and reviewed and updated at Tananarive.

The Present State of African Universities

In the assessment of the present state, character, and staff needs of higher education in African countries, it is necessary to arrive at precise definitions of terminology. In the United States, the term "higher education" embraces colleges and universities, teacher training schools, technical institutes, and other postsecondary vocational institutions. In Africa, however, most teacher training institutes and technical schools do not require completion of secondary education for entry and cannot be considered institutions of "higher learning." In Ghana, for example, technical and trade schools recruit from the fourth form of the middle schools. In Sierra Leone, students may enter teacher training schools upon completion of the fourth form of secondary schools. In East Africa, students who pass the Cambridge Overseas Certificate examination but who do not receive "firsts" are ineligible for admission to Makerere College, but are considered qualified candidates for teacher training institutions.[12]

Thus, any precise use of the term "higher education" in regard to African educational institutions suggests a limitation to those colleges and universities which restrict admission to students who have completed secondary education or its equivalent and have passed the required entrance examinations. (Some students must spend 1 or 2 years in additional study to be able to pass the Cambridge Overseas Certificate examination or its equivalent in English-speaking countries and the "baccalaureat" in French-speaking countries.) In other words, in Africa, there are universities and equivalent institutions which offer courses leading to an academic degree; they are readily identifiable and normally enjoy considerable constitutional freedom despite their financial support from the State. Moreover, within the academic tradition to which they belong, they set their own standards, plan their own curriculums, and recruit their own staff.

Most of the delegates came from universities and colleges of the first type. Thus, the very important problems of postsecondary but nondegree higher education did not form part of the Conference's deliberations—a "void" which all agreed must be reviewed and carefully considered at a future date. In addition, the Tananarive deliberations excluded the older institutions of North Africa and the network of universities and new tribal colleges of South Africa.

A major recommendation of the Conference, therefore, was the decision to focus its thinking on the expansion of the physical plants, faculty staff, and administrative personnel of Middle Africa's 32 institutions rather than to encourage a proliferation of small and inadequately supported institutional growth across the massive African continent.

These 32 bear mentioning, for in analyzing faculty requirements over the next 20-year period, whether African or expatriate, this precise number establishes limits to personnel goals and provides staffing targets which are at once practical and realistic, at least within certain prescribed limitations. During the Carr Saunders study, for example, African universities were requested to forecast the probable number of teaching posts they would require for 3 target years—1966–67, 1970–71, and 1980–81.

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[12] Kilson, *Trends in Higher Education*, *op. cit.*, p. 61.

This they did, but their estimates were made with two qualifications in mind: First, that all predictions had to be made in accordance with established government policy and predictable budget estimates; and second, that forecasts for 1966–67 had a fairly firm basis, those for 1970–71 were more dubious, and those for 1980–81 were little more than educated guesses.

Grouped together, the 32 institutions are located in 23 States or territories. Twenty-eight already exist, and four are being planned. Several have religious backgrounds, although the process of secularization has either begun or will inevitably set in as they become more dependent on State financial aid. The 32, grouped according to the language of instruction, are as follows:

ENGLISH-LANGUAGE UNIVERSITY INSTITUTIONS (21)

Country	*Institution*	*Enrollment (academic year 1960–61)*
Basutoland	Pius XII College	169
Ethiopia	Haile Selassie I University	397
Federation of Rhodesia and Nyasaland.	University College of Rhodesia and Nyasaland.	248
Ghana [1]	University of Ghana	1,300
	Kwame Nkrumah University.	1,300
	University College of Cape Coast.	150
Kenya [2]	Royal College, Nairobi	465
Liberia	University of Liberia	623
	Cuttington College	140
	Maryland College of Our Lady of Fatima.	18
Mauritius	University College	(3)
Nigeria [1]	University College of Ibadan.	1,800
	University of Ife	700
	Ahmadu Bello University	900
	University of Lagos (med.)	80–100
	University of Nigeria, Nsukka.	800
Nyasaland	University College	(3)
Sierra Leone	University College of Sierra Leone (Fourah Bey College).	302
Sudan	University of Khartoum	1,625
Tanganyika	University College of Dar-es-Salaam.	35
Uganda	Makerere College	911

FRENCH-LANGUAGE UNIVERSITY INSTITUTIONS (11)

Country	*Institution*	*Enrollment (academic year 1960–61)*
Burundi	Institut Facultaire et Faculté des Sciences d'Usumbura.	53
Cameroun	Université Federal du Cameroun.	431
Congo (Brazzaville)	Centre d'Enseignement	350
Congo (Léopoldville) [2]	Lovanium University	628
	Université de l'État, Elizabethville.	
Guinea [3]	Université de la Guinee et du Mali (Sciences).	----------
Ivory Coast	Center d'Enseignement Superieur, Abidjan.	254
Madagascar	Université de Madagascar	1,129
Mali [3]	Université de la Guinee et du Mali (Arts).	----------
Senegal	Université de Dakar	1,398
Somali Republic	Instituto Universitario (Italian language).	----------

[1] Academic year 1962–63 (approximate).
[2] Academic year 1961–62.
[3] Planned.

NOTE.—Recent and accurate university enrollment figures of full-term, degree-earning students are difficult to provide because of the transitional nature of several institutions listed. Statistics, except where indicated, are for the 1960–61 academic year and come mainly from two published sources: *The Educated African*, A Country-by-Country Survey of Educational Development in Africa, completed by Ruth Sloan Associates and edited by Helen Kitchen (Praeger, New York, 1963), and *Africa and the United States, Images and Realities*, Background Book for 8th National Conference, U.S. National Commission for UNESCO, Boston, Oct. 22–26, 1961. Figures for 1962–63, where given, are approximations supplied by Embassy officers of the countries concerned.

Eight of these universities or university-level institutions have a regional foundation in that they are and will continue to be supported and financed by a group of states. They are the Centre d'Enseignement Superieur de Brazzaville; the University College of the Rhodesias and Nyasaland; the Universite de la Guinee et du Mali; the Centre d'Enseignement Superieur in Abidjan; and the University of East Africa, which will serve as the "umbrella institution" for Makerere College, the Royal College Nairobi, and the new University College in Dar-es-Salaam.

Seven serve only small population areas and offer facilities in only a small number of disciplines and are unlikely to achieve one of Tananarive's primary goals—that of reaching an enrollment of 5,000 students. These are: Pius XII College in Basutoland; Institut Facultaire et Faculté des Sciences d'Usumbura in Burundi; Maryland College of Our Lady of Fatima in Liberia; the proposed University

Colleges in Mauritius and Nyasaland and the Instituto Universitario in the Somali Republic.

In view of the extremely high cost of medical education, university-level instruction in medicine should be concentrated in a few institutions. It is offered or will be shortly introduced in the following 13 institutions: Lovanium University in Léopoldville; Université de l'Etat in Elizabethville; Haile Salassie I University in Ethiopia; the University College of the Rhodesias and Nyasaland in the Federation; University of Ghana in Accra; Centre d'Enseignement Superieur in Abidjan; Université de Madagascar in Tananarive; the Federal University of Lagos and the University College of Ibadan in Nigeria; Université de Dakar in Senegal; University College of Sierra Leone in Freetown; University of Khartoum in the Sudan; and Makerere College in Kampala, Uganda.

Additional faculties of medicine, however, are being planned and in the next 5 years will be offered at the Federal University of Camerouns, the University of Ife in Nigeria, and at Mauritius University College. The University of Nigeria in Nsukka and the University of Liberia in Monrovia have given thought to establishing medical training facilities.

The five Middle African universities offering training in veterinary science in close collaboration, principally for reasons of economy, have expanded or will expand their collaboration. They are Lovanium University in Léopoldville; the Royal College in Kenya; the Universite de Madagascar in Tananarive; Ahmadu Bello University in Nigeria; and the University of Khartoum in the Sudan. In Burundi and Chad, establishment of institutes of zootechnology are under consideration, and drawing board plans call for setting up veterinary schools at some future date in Ethiopia and in Nigeria at the University of Ife, University College of Ibadan, and the University of Nigeria at Nsukka.

It should be noted in this analysis of the present state of African universities in Middle Africa, particularly with staffing needs in mind, that in 21 universities the medium of instruction is English; in 10, French; in 1, Italian. Recently, Lovanium University in Léopoldville, despite its original French character, announced it had become bilingual, with both French and English the recognized languages of instruction; it may, however, be some years before this ideal of bilingualism is reached. Similarly at Tananarive, both language groups recognized that greater attention must be given to the teaching of English language and literature studies in French-medium universities, and conversely, English-medium institutions must do more in French language and literature studies.

U.S. Contributions to African University Staff Needs

U.S. contributions to African university staff needs, to date, can only be described as minimal. The Carr Saunders study underscored the fact that out of 2,166 university teachers on faculty staffs of Middle African universities during the 1960–61 school year, only 107—or less than 5 percent—came from the United States.[15] Any survey of this number reveals that these educators were recruited under a variety of public and private efforts, the chief being those which are described below.

As of December 31, 1962, a total of *27* AID university contracts operated in 12 African countries. These contracts involved 23 American universities whose operating budgets totaled $25,048,481—an amount second only to that allocated to the Near East and South Asia area in terms of AID funds expended for university-assisted projects. The field of education is supported by 19 contracts, agriculture by 4, public administration by 2, and health and audiovisual communications by 1 each.[16] The number of staff supplied under these contracts is difficult to determine for the simple reason that most AID university contracts provide for "advisers" rather than teachers. While it is true that these "advisers" often find themselves performing classroom duties and most are recruited directly from university lecturing and administrative positions, the fact remains that in terms of status, salary, and allowances, they are members of U.S. diplomatic missions abroad and thus tend to fall outside the circle of formal academic staffs of the majority of African universities.

The second source of supply of U.S. lecturers in Africa is the Department of State's exchange program. During academic 1962–63 year, 26 Fulbright-Hays or Smith-Mundt lecturers and research scholars were to be found in 14 African countries or territories. In addition, the exchange program sup-

[15] *Carr Saunders Report, op. cit.*, p. 17.

[16] *Aid-Financed University Contracts* as of Dec. 31, 1962, Contract Services Division, Agency for International Development, Department of State, Washington 25, D.C.

ports three interuniversity agreements under which another half-dozen U.S. professors are currently teaching and assisting in establishing new departments or faculties. These three are in the fields of political science, engineering, and the social sciences, and involve respectively the University of Chicago and Makerere College in Uganda, Northwestern University and the University of Khartoum, and UCLA and the University of Khartoum in the Sudan. They differ mainly from AID university contracts in that the initiation of the agreement is placed directly in the hands of the two universities involved and thus supports the principle of university autonomy. AID university contracts, on the other hand, are a matter of negotiation between both governments and involve a government-to-government relationship before the two universities enter the picture. The exchange program professors are not included among the diplomatic missions of overseas posts, and their stipends usually reflect the going rate for Fulbright-type lecturers the world over.

The African-American University Program (AAUP)—a Ford Foundation-supported project involving UCLA, the University of Chicago, Columbia University, MIT, Northwestern University, and Yale—is perhaps the most significant of American private efforts interested in African university staffing problems. It was inaugurated in 1958 and expanded in 1961 to provide advance training for prospective members of African university teaching staffs, the appointment of American scholars to meet instructional needs identified by the heads of African institutions as urgent, and to facilitate contacts between scholars from African and American universities through short-term professional visits geared to lecturing and research opportunities. Though modest in size, this program is well focused and has contributed considerably to recent Afro-American interuniversity relations in a variety of disciplines. In the 5-year period since 1958, 11 exchanges have occurred in the field of staff training (both American and African), 8 grants have augmented teaching at African universities (Americans to Africa), 14 grants have been made to facilitate professional contact with American institutions (Africans to American universities), and 9 have been in the field of research collaboration and consultation (largely American to Africa).[17]

[17] *African-American University Program.* U.S. Delegation Briefing Documents, Department of State, Washington 25, D.C.

The Afro-Anglo-American Program designed to strengthen teacher education in Africa is another private effort which arranges staff exchanges, brings African fellows to the United States, and operates a training program, conducted jointly by Columbia University Teachers College, and the University of London, for Americans preparing for educational service in Africa. For the most part, this program concentrates on primary and secondary school teaching, but its involvement of the staffs of Columbia University Teachers College, the University of London Institute of Education, and the Departments and Institutes of Education at the University College of Sierra Leone (Fourah Bey College), the University of Ghana, the University College of Ibadan in Nigeria, Makerere College in Uganda, and the University College of the Rhodesias and Nyasaland means that a considerable amount of staff interchange at the university level has taken place in recent years.[18]

In addition, a scattering of American industrial and foundation-supported projects place teaching staff in African universities. The Socony-Mobil Oil Co., for example, has endowed a chair of business administration for 5 years at the University of Ghana. The Rockefeller Foundation is contributing expenses toward visiting professors of chemistry at the same institution. The Firestone Rubber Co. provides funds to support staff and textbooks at the School of Forestry of the University of Liberia. Both the Ford and the Rockefeller Foundations are supporting the development of African studies at the University College of Ibadan, with Ford's grant financing three professorial chairs over the next 5-year period.[19]

If only smallness of numbers characterized American staffing efforts in the university institutions of Africa, the reasons could be readily understood. It was not until 1960—Africa's year of independence—that the trend away from rigid colonial control over the affairs of African institutions of higher learning became apparent and the door to stronger American involvement was opened. However, as political pressures of independent Africa have led to stronger requests for U.S. participation in African educational

[18] *Ibid.*

[19] *Inventory of American Aid to Education in Africa*, 1961–62, Prepared by Gwendolyn Groomes for the Africa Liaison Committee of the American Council on Education, October 1962.

development, the unrelated nature of the American response became evident. Until purpose, budget, program, and personnel are brought into a concert of sharp policy focus and efficient administrative operation, the U.S. impact on African higher education is likely to remain uneven, peripheral, and inadequate. This fact carries with it inherent dangers to the U.S. interest. In Africa, it is apt to lead to unhealthy frustrations of expectant institutions and governments who desperately need increased help from outside sources. In the United States, it will lead (if it not already has led) to an inevitable chaos of uncoordinated effort as individual organizations and universities and colleges respond to African opportunities with the humanitarian enthusiasm so characteristic of American idealism.

U.S. Exchange and Recruitment Procedures

The major channels through which the United States recruits U.S. professors to go overseas represent an understandable but still uncoordinated pluralism of effort. And for Africa, it has no starting point, no centralized structure, no overall policy guidelines.

The largest African program in budget support and number of persons who work and teach abroad is the AID university contract system, previously cited. Second is the Department of State's exchange program. Third is the expanding private programs usually supported by foundation funds. The administering mechanisms of each bear scrutiny and analysis.

In the early years of the point IV, or old ICA, program, it was recognized that U.S. universities were a reservoir of technical manpower which could easily be tapped for international assistance projects, and it was believed that their faculties were in a better position than most Government agencies to recruit high-caliber staff, and that they were equipped to interpret U.S. ideals and aspirations to the peoples of the world.

As these programs of technical assistance developed, the U.S. university, under a typical ICA contract, worked overseas with a "sister institution" in such fields as curriculum content, teaching methods, research, and adult education programs. Emphasis often was on technical subjects directly related to a country's economic development, and the fields of agriculture, home economics, general and vocational education, public health, engineering, public administration, and business management received the most attention in that they often represented the applied fields of the mechanical arts in which U.S. universities excel.

Several patterns of interuniversity cooperation developed from this system, but these are typical: Following government-to-government negotiations, a U.S. university would send a team of professors to the "sister institution" to advise its officials and assist them in program planning. Out of this visit usually grew a formal contract under the direction of a campus coordinator and team director, with the staff team usually drawn from the faculty of the U.S. institution. Team members, occasionally reinforced by short-term consultants, worked primarily with foreign colleagues. In theory, Americans were originally supposed to do little classroom teaching, except for demonstration purposes or in courses for which qualified lecturers were not available in the host country. In practice, however, they often did. The foreign university, in turn, would send a number of its staff members or prospective staff members to the United States for training. These men, often called "participants," would receive special education generally not available in their own country. Upon their return, they were expected to take over the responsibilities initially assumed by the U.S. team. This process, in turn, enabled the U.S. university to "phase out" its program. The goals of such interuniversity relationships are technical self-sufficiency and institutional self-development. In short, the function of the U.S. university is to generate change and to serve as a catalyst.

In recent years, it has become fashionable on many U.S. university campuses to be critical of the university contract system. In basic concept, however, there is little doubt about the wisdom of the idea, although in practice it is easy to find mistakes and to record failures. Undoubtedly, much good has been accomplished by the method. Walter Adams and John Garraty have analyzed the method in detail in their perceptive little book, *Is the World Our Campus?*[20] It is not the purpose of this paper to evaluate such programs; yet it is within its scope to list the chief limitations of the contract system in Africa. These fall into four categories.

[20] Walter Adams and John Garraty, *Is the World Our Campus?* (Michigan State University Press, East Lansing, Mich., 1960.)

First, the 27 AID university contracts currently operating in 12 African countries simply do not meet the tremendous appetite for teaching staff which the African educational revolution is stimulating throughout the continent. Moreover, the continued accent in AID contracts on "advisers" rather than teachers further restricts their usefulness as a primary means of providing staff help.

Second, by concentrating on the mechanical arts, AID university contracts limit their operations to a fairly narrow part of normal university life. Despite the tremendous need in Africa for practical training and skilled and semiskilled manpower, total human resource development demands equal attento the liberal arts and the humanities, and in the special case of Africa, to history, art, music, sociology, government, and the indigenous cultures of Africa's diverse and varied regions.

Third, the AID salary structure and allowance schedules, developed to secure able persons and designed to protect the staff benefits such as pension rights, leave provisions, tenure, salary increments, and promotions, often lead to serious imbalances and insidious comparisons with the "going rates" of expatriate professional help from other countries. Moreover, the contract combination of AID stipends and allowances tends to support a living standard somewhat higher than that of other foreign and top African university staff members, and makes it difficult for African institutions to establish minimum and maximum salary levels geared to local, British, or French levels. Such a situation may lead to professional problems in African universities where a majority of the staff members are European-educated professors. They feel that their own degrees and qualifications, which they consider impressive, are being ignored through prevailing systems of lower salaries and allowances. There is no simple solution to this problem. Less attractive salary and allowance schedules would make recruiting even more difficult than it is at present. Retention of a portion of salary for deposit to the individual's credit in his own country has been suggested as a means of equalizing living standards without reducing his total benefits.

A fourth limitation is the lack of centralized planning mechanisms and well-coordinated policy guidelines for a visible and well-focused total pattern of American effort to assist African higher education.

The Department of State's educational exchange program also faces serious problems. As an educational exchange effort, its primary legislative purpose is to further understanding between exchange countries and international good will rather than to assist in institutional development and the establishment of new university departments and programs. This means concentration on 1-year grants, an allowance structure which does not pay the travel of dependents, no special or diplomatic privileges, and often, because of the short term of the grant, teaching and lecturing assignments outside the mainstream of the more rigid and specialized degree-earning curriculums of African university life. An exception is the university agreements already mentioned which correct some of these defects.

Recruitment of exchange professors falls under the authority of the Conference Board of Associated Research Councils through a contractual arrangement with the Department of State—a "mechanism" originally established to support the foreign currency operations of Fulbright programs. This board, working through subject-matter committees selected from American universities and colleges, does a creditable job within severely limited arrangements. It selects annually some 500 American professors and research scholars on a worldwide basis. About half come through the open, competitive process of publicly announced "Fulbright" openings in various subjects in a variety of countries for which any qualified professor can apply. The others are directly recruited through contact with American university campuses and department heads. In recent years, distribution of the 500 exchange program professors who go overseas each year has been equally divided among European countries—the original heartland of most of the original Fulbright exchange arrangements—while the remainder go to non-European or underdeveloped areas.

Generally speaking, sabbatical opportunities and availability of foreign currency in specific countries guide the flow and influence the selection of American professors, lecturers, and research scholars who annually go abroad under the exchange program. In Africa, there is little foreign currency; hence, requests for U.S. professors must be supported by hard dollars and requests often compete against other program priorities in the student, specialist, and leader fields. As previously indicated, this year, 26 Fulbright-Hays or Smith-Mundt exchange professors are teaching in 14 African countries.

Perhaps, the chief weaknesses of the Conference Board selection process results from the fact that its staff lacks direct contact with African universities and must depend heavily upon field reports submitted by embassies, USIS establishments, or (in the few countries where they exist) Fulbright Commissions [21] for the precise knowledge needed to fit a man to a job. Second, the Conference Board does little personal interviewing in appraising an applicant's qualifications. Lastly, the professional screening committees have no contact with the institutions for which they are considering candidates.

The principal private programs under which American university staff go to Africa such as the African-American University Program, the Afro-Anglo-American Program, or various foundation efforts depend administratively upon corporate decisions and knowledgeable experts within the foundations or interuniversity committees in the organized programs. Both know African university institutions from the ground up, and their members enjoy the closest of professional and personal relations with individual African university principals, vice chancellors, or department chairmen. This gives their advisory and management responsibilities a much needed professional competence.

Needed—A National Recruitment Mechanism

As one attempts to identify the issues and delineate the size and nature of Africa's challenge to American higher education, the problem resolves itself into five questions: (1) What target goals represent practical operational objectives in terms of exchange and assistance efforts in the field of African university staffing? (2) What sound educational and political reasons exist for taking action? (3) What type of staff recruitment mechanism is needed? (4) What action has been taken to date? (5) What factors need to guide any final decisions?

The size of Africa's staffing problem at the university level, while formidable, is not excessively so. At the present, the 107 Americans on Middle African university faculties form less than 5 percent of the total 2,166 persons reported by the Carr Saunders study, of which more than 1,500 are expatriates or foreign born. North African universities for the most part are eliminated from the problem because their institutions are now fairly large, their expansion plans modest, and they may be able to supply any additional teachers they need from within their own Arabic-language areas. South African universities are also eliminated for different reasons, even though several of their English-medium universities reportedly are having difficulty keeping or finding new staff, while the new tribal university colleges established in recent years by the present Nationalist Government demand a loyalty to a racial policy unattractive to university staff members of most Western countries. This means that at the present time where the staff problem is most acute—namely, the Middle African university institutions—approximately 60 percent of all expatriate staff is being supplied by United Kingdom universities, another 12–15 percent come from French-speaking countries. It is not out of line, therefore, in both practical and financial terms, to suggest that an immediate program goal for the United States might well be an increase to 25 percent of this total, or 400–500 professors during the next 2-year period.

In establishing this goal against present British and French figures, we should note that in order to send large numbers of university staff members overseas, both the United Kingdom and France have developed strong and centrally directed programs of screening and supply. The Inter-University Council of Great Britain, with an incredibly small staff, does an amazing job of recruiting university professors not only for African institutions but also for British university colleges located throughout the Commonwealth. France, in many ways, has mastered the supply problem even more efficiently through its highly centralized Ministry of Education and Ministry of Technical Development, although, of course, the French are concerned with far fewer institutions.

The United States needs to develop similar national policies and similar selection techniques for several reasons.

First—there is danger, as African university staff needs grow during the next few years, that a chaotic pluralism of American response will develop not dissimilar to that which presently characterizes African student scholarship efforts in this country. Both in terms of available resources and in terms of the national interest, a comparable condition should not be permitted to develop in any future flow of American university professors to Africa.

[21] Ethiopia and Ghana

Second—a unique educational and political situation has developed in Africa in which the United States is being offered the opportunity to help a continent as well as a group of new nations build a network of higher educational institutions capable of contributing significantly to Africa's human resource needs. The uniqueness of this opportunity lies in the fact that nowhere else in the world are embryonic institutions seeking to establish on their own campuses the blend of practical and liberal education which is so characteristic of American university activity and which has served so well the development of our own country's complex technical, social, and cultural life.

Third—this opportunity comes at a time when American universities, in reappraising their own goals and role in society, have been urged by a distinguished group of educators to consider the fact that a "first-class liberal education in the second half of the 20th century should unquestionably include an effective international component." [22] This suggests some kind of midcareer, inservice, and preparatory attention to the need to provide present and future American university teachers and research workers with substantive experiences in what is fast becoming one of the most important areas of international affairs—the countries and cultures of the less-developed areas of the world, one of the chief being Africa. What better way is there to develop such a component than through the introduction or use of an overseas university relationship in staff training, supply, or exchange opportunity?

Fourth—the Tananarive Conference certainly underscored the fact that Africans themselves have decided to contribute to expatriate professor costs. Thus, our own exchange and assistance contributions of the future, are likely to consist of "topping off" supplements necessary to recruit quality personnel. In turn, the operation of this principle of cooperative financing will reduce aid and exchange program costs and make possible the financing of a proposed U.S. goal of 25 percent increase.

Fifth—the international conference technique and the establishment of a permanent organization of African Ministers of Education, which will review regularly the progress being made on the Addis Ababa Plan and its supplementary recommendations (Tananarive and similar UNESCO conference conclusions), mean that periodically the United States will be faced with requests from African States and UNESCO to strengthen and expand its assistance to African educational development.

Against this background, recent discussions in government and private foundation circles on the need to establish an "Overseas Educational Service" designed primarily to strengthen U.S. recruitment of university teachers and administrators emphasize the fact that concerned people have not been unmindful of the problem. However, such discussions need to be stepped up and decisions made.

The proposed "OES" is a private, nonprofit, free-standing corporation under the control of a self-perpetuating board of trustees representative of education and public affairs. Its administrative expenses would presumably be met for an initial period by foundation grants sufficient to engage a high-quality president and staff of perhaps five or six senior officers, three or four of whom would be regional specialists on the educational systems of the underdeveloped areas. It is axiomatic that it would have to operate within the power grid of American higher education, government programs, private foundations, and international and regional institutes. Further, it need not replace present arrangements, but it could give direction to all.

Although "OES" or its equivalent must ultimately concern itself with worldwide requirements of less-developed areas, in its initial stages it might well give primary attention to the immediate problems and needs of higher education in Africa. In doing so, it would have to combine the best (and avoid the worst) of present government and private programs—the former being the focus on educational training in the mechanical arts which developing countries desperately need and which the AID university contract program now provides, attention to the humanities and liberal arts which form the core of exchange program operations, and the professional competence, administrative know-how, and academic rapport of private university and foundation projects. To this must be added the removal or mitigation of many of the economic and career deterrents to American educational exchange work overseas—in terms of tenure, pensions, dependent costs, allowances, reemployment rights, and the opportunity to remain overseas for longer periods.

[22] *Report of the Committee of the University and World Affairs*, J. L. Morrill, Chairman, The Ford Foundation, New York 22, N.Y., 1960, p. 17.

Perhaps the most serious threat to the establishment of such a national mechanism is a fundamental problem of American government in the 20th century. Basically, this is our preoccupation with servicing and preserving the institutions of our dynamic pluralism to a point where we often destroy our ability as a nation to respond to problems of foreign affairs. This is particularly true these days when we attempt to apply those ingredients of good government, which Alexander Hamilton perceptively described in his famous *Federalist Paper No. 70* as "energy, unity, duration, adequate provision for support and competent powers." [23] Thus, the move to distribute pieces of the basic OES idea among a junta of several organizations now involved in some aspect of the university staff supply problem such as the new Education and World Affairs group, the National Academy of Sciences, the American Council on Education, and the Conference Board of Associated Research Councils suggests the possibility that we are being blinded by our devotion to democratic pluralism. James MacGregor Burns, writing with the same perspicuity on the problems of government which characterized Hamilton's pen and thoughts 175 years ago, recently suggested "the cure for democracy, people used to say, is more democracy. A half century of hard experience has shown this cliche to be a dangerous half-truth. The cure for democracy is leadership—responsible, committed, effective and exuberant leadership." [24]

Africa's challenge to American higher education requires no less a response. The business of transplanting people from an affluent to an underdeveloped society, often synonymous with the crossing of racial, religious, and climatic frontiers, is never easy and often becomes frustrating and increasingly difficult as we attempt to spread the job among a multiplicity of organizations and programs. The process calls for unity of direction and administrative effort, skill, expert knowledge, established goals, sound financing, and above all, sensitivity and patience of those doing the transplanting. In the full sense of the problem, it must be a professional operation, meticulous in detail, firm in purpose, and adequate in response. Present American assistance to African higher education is not characterized by these traits simply because it is so many-sided, pluralistic, unrelated, and underfinanced.

The African challenge to American higher education was given sharp definition by the Tananarive Conference of last September. It is one which cries for reviewing and strengthening the methods by which the United States approaches the problem and the means by which it should do the job.

[23] *The Federalist Papers, No. 70* (National Home Library Foundation Edition, Washington, D.C., 1937), p. 455.

[24] James MacGregor Burns, *The Deadlock of Democracy* (Prentice-Hall, Inc., Englewood Cliffs, N.J., 1963), p. 340.

OFFICE OF EDUCATION *Studies* AND *Surveys*

Manpower Needs in Mathematics

An Office of Education study of degrees in mathematics was discussed at a recent national meeting on manpower. Seventy leading mathematicians, representing the seven constituent members of the Conference Board of Mathematical Sciences, met in Washington on April 16 and 17 to consider the December 12, 1962, report of the President's Science Advisory Committee, popularly known as the Gilliland Report. The report concerned the role of graduate training in engineering, mathematics, and physical sciences in meeting the Nation's manpower needs in science and technology.

Papers were presented describing the current status of mathematics education in U.S. colleges and universities and the production of graduates at all levels; the anticipated demands for mathematicians; and the ways in which the recommendations of the President's Committee might be implemented.

Clarence B. Lindquist, specialist for mathematics and physical sciences in the Division of Higher Education, Office of Education, represented the U.S. Department of Health, Education, and Welfare at the conference. He presented a paper on trends of degrees in mathematics, engineering, and physical sciences, and the supply and demand of college teachers in these fields. His presentation was based on a depth study he has just completed of degree trends in the sciences, mathematics, and engineering over the period 1949–50 through 1959–60. The publication resulting from this study, titled *Degrees*

in the Biological and Physical Sciences, Mathematics, and Engineering, is scheduled for release through the U.S. Government Printing Office in July 1963.

International Education

Public Administration in Peru

The Agency for International Development has approved a U.S. technical assistance program under the Alliance for Progress to help the Government of Peru to improve public administration. To carry out the program, AID has awarded a 2-year, $900,000 contract to the Institute of Public Administration (IPA). IPA will work with the Peruvian Government in establishing a school of public administration. Consultants from IPA will also present recommendations for governmental reorganization, including consolidation of functions, to better support and facilitate governmental efforts in national development.

Several international agencies are assisting IPA in creating an immediate investment program and a long-term development plan. These agencies include AID, the Organization of American States, the Inter-American Development Bank, and the Economic Commission for Latin America.

U.S. Educators Aid Africa

The Agency for International Development (AID) has awarded a 3-year, $287,100 contract to the California State Polytechnic College to assist in the development, organization, and operation of a new adult educational institution, the College of Further Education, being opened in Northern Rhodesia.

Working through the Northern Rhodesian Government's Ministry of African Education, California Polytechnic will provide the services of four educators in teaching, research studies, advisory, and consultation functions. In addition, it will also procure at least some of the materials, equipment, and supplies for the teaching and development program.

The Rhodesian institution will provide adults an opportunity for further education in general and professional fields of study on a full- or part-time basis. Students generally will be persons who studied previously at the secondary level. In addition to the center in the capital, Lusaka, the school will offer extramural study (extension services) in the provinces.

The school, which opened in May, will operate for three academic terms a year in a seven-story building recently completed. The structure, including furniture and equipment, cost approximately $800,000 and was financed one-third by the Northern Rhodesian Government, about one-fourth by the United States and the balance largely from United Kingdom sources.

Food for Peace Goes to Peru

An estimated 400,000 Peruvian school children will be fed during the 1963 school year under an expanded Alliance for Progress food-for-peace program.

The Agency for International Development will make available nearly 10,000 tons of food to support the school lunch program through the end of the school year on December 15, 1963, and in addition will continue to feed 60,000 of the neediest school children through the normal vacation period, ending March 31, 1964. This will be more than double the number of children—183,000—who were fed under the program during the 1962 school year when it was started following a pilot project for 30,000 children in 1961.

The program is operated by a National Council under the Peruvian Ministry of Public Health and Welfare. A representative of AID serves as an adviser to the Council and 46 U.S. Peace Corps Volunteers work with the program in various zones.

Boston University Aids Guinea

Boston University under a 14-month, $33,500 contract with the Agency for International Development will assist in teaching public and business administration to civil servants at all levels of government in the African Republic of Guinea. The university has sent a team of educators to provide technical advice and assistance by working with the director of the National School of Administration in the capital city of Conakry.

The university's development and research center

will aid in the project by conducting research in public administration, and economics in French-speaking African. Research findings will be used in planning the academic program of the school and as a service to AID technical operations.

1964–65 Fulbright Awards

THE CLOSING date for applications for U.S. Government grants for university lecturing and advanced research under the Fulbright-Hays Act (Public Law 87–256) for 1964–65 is August 1, 1963.

Grants are available to lecture and conduct research in Europe, the Near and Far East, Africa, and South and Southeast Asia. For lecturers, a minimum of 1 year of college teaching experience is required; for research, a doctoral degree or recognized professional standing. U.S. citizenship is required for both positions and, in some cases, a knowledge of the language of the host country.

Application forms and additional information may be obtained from the Committee on International Exchange of Persons, Conference Board of Associated Research Councils, 2101 Constitution Avenue, Washington 25, D.C.

Germany Offers Site for U.S. University Branch

THE CITY of Freiburg im Breisgau, Federal Republic of West Germany, is offering U.S. colleges and universities an unusual opportunity for establishing an oversea branch in Freiburg.

The city plans to restore the medieval Kornhaus (city granary) which was destroyed during the war. The building will be centrally located, on a lot within walking distance of Freiburg University. The city is willing to provide the site free of rent for 20 years to the U.S. Information Service (Amerika-Haus Freiburg) and to an American university which will share the interior of the restored building.

Total space available to the university (excluding staircase, halls, washrooms, etc.) is approximately 7,290 square feet. In addition, a lecture hall seating 168 people and a discussion room seating 70 people are available for shared daytime and evening use with the Amerika-Haus. Special requests as to the interior construction of the building will be considered by the city.

The total costs of the new building are estimated to be DM 2 million ($500,000), of which DM 300,000 ($75,000) is to be paid by the Federal Government of West Germany. The university's share for the offered space is approximately DM 850,000 ($212,500). Two methods of payment are suggested:

Payment in one installment which makes rooms free of rent in perpetuity.

Payment of a monthly rent in the amount of DM 5,660 ($1,415, or 8 percent of the building sum)—for interest and amortization.

Freiburg is situated in the Black Forest close to both France and Switzerland. It has a population of 150,000. With over 12,000 students, the University of Freiburg is one of the largest in Germany and offers all fields of study.

Interested persons may write to Dr. George P. Clark, Director, Amerika-Haus Freiburg, 8 Bertoldstrasse 7800 *Freiburg im Breisgau*, West Germany.

Program Assists Foreign Students

THROUGH a $108,000 grant from the Department of State's Bureau of Educational and Cultural Affairs, the Institute of International Education has established a Cooperative Service on Summer Employment and Practical Training for Foreign Students as an administrative unit to encourage, assist, and coordinate the efforts of community organizations in finding summer jobs for foreign students.

The Cooperative Service will—

Stimulate national support of the program;

Allocate funds to support placement services in key cities where large numbers of foreign students congregate in summer months; and

Coordinate available employment information on a national scale.

Suggestions and questions on employment and practical training for foreign students should be addressed to local foreign student Advisers or college placement officers.

Government Grants to Graduate Students

MORE THAN 800 U.S. Government awards will be available to qualified American graduate students for study or research in any one of 49 countries during the 1964–65 academic year. The fellowships, available under the Fulbright-Hays Act of 1961, are administered by the Institute of International Education (IIE) as part of the educational exchange program of the Department of State.

There are three types of awards: U.S. Government full grants, which provide round-trip transportation, tuition, books, and maintenance for study in 37 countries; joint U.S.-other government grants, in which the United States provides travel and the foreign government provides tuition and maintenance for study in 18 countries; and U.S. Government travel-only grants, which are intended to supplement maintenance and tuition scholarships received from a university, a private donor, or a foreign government. The travel grants are available for study in eight countries.

Opportunities are available to graduate students interested in teaching English as a foreign language at universities in India, and to those interested in teaching American language and literature, history, philosophy, or law at Italian universities.

General eligibility requirements for all types of grants are: U.S. citizenship, a bachelor's degree or its equivalent before the beginning date of the grant, language proficiency sufficient to carry out the proposed study project and for general communication, good health, a good academic record and demonstrated capacity for independent study. Preference is given to applicants under 35 years of age who have not previously lived or studied abroad.

Students now enrolled in a college or university should consult the Fulbright program adviser on their campus. All others may secure information and application forms from the Counseling Division of the Institute of International Education, 800 Second Avenue, New York 17, N.Y. All requests for application forms must be postmarked by October 15, 1963. At-large applicants must submit their completed applications to IIE by November 1, 1963. Enrolled students must submit applications to their Fulbright adviser by the campus closing date.

OE program notes

Institute Planned for Cuban Refugee Teachers

THIRTY CUBAN REFUGEE teachers will receive specialized training this summer at an institute to be conducted by the State University of Iowa, in cooperation with the U.S. Office of Education. The training makes it possible for the teachers to qualify as Spanish teachers in U.S. public high schools.

This training is part of the Iowa Teachers Project, a cooperative activity providing on-the-job resettlement for the 30 teachers and their dependents (an estimated 120 persons). It is being financed jointly by the State of Iowa, the State University of Iowa, and a Federal grant of $30,000 allotted to the Office of Education by the Welfare Administration of the U.S. Department of Health, Education, and Welfare. This grant is being made from appropriations authorized under the Migration and Refugee Assistance Act of 1962.

Participating in the training will be six Cuban teachers already serving in Iowa schools and 24 additional teachers selected through the Cuban Refugee Center, Miami, Fla. Those who complete the program successfully will hold emergency teaching certificates issued by the State of Iowa Department of Public Instruction and are assured of positions as Spanish teachers in the public high schools of Iowa.

The instruction, which is similar to but not identical with training offered at National Defense Modern Foreign Language Institutes, will consist of courses in English, education, and contemporary methods of teaching Spanish in U.S. secondary schools, and in the history, culture, and social structure of the United States. The program began on June 10, and will terminate on August 7, 1963.

National Defense Education Act

Three new language research projects approved

Three new language research projects have been contracted for by the U.S. Office of Education, to be financed from funds authorized by Title VI (Language Development) of the National Defense Education Act.

1. The University of Texas will prepare a text of spoken Egyptian (Cairo) Arabic for college students. Currently, there is no adequate text for intensive, elementary oral instruction of this dialect at the university level.

The text will consist of approximately 30 lessons, each in 2 parts (conversations and drill), and will cover a 2-semester course. The text will also include an outline reference grammar, a glossary, and notes on the Arabic language, including the major dialects

as well as modern standard and classical Arabic. Tapes with multiple repetitions and spaces for repetitions by the students will be prepared for all of the conversations.

The collection and organization of materials and preparation of the text will be directed by Walter Lehn, associate professor of [Arabic] linguistics and director of the Middle East Center at the University of Texas. The project began June 1, 1963, and will be completed by January 31, 1965, at a cost of $24,166.

2. The University of California, Los Angeles, will conduct a research project entitled "Sequence of Discrimination and Differentiation Training in the Teaching of French in the Early Grades." This investigation aims at determining the optimum order of presentation and the interrelation of discrimination (the perception of fine distinctions in the foreign sound system) and differentiation (the ability to reproduce those distinctions orally).

In the initial phase of the project, a set of tape-recorded French lessons with accompanying visual aids will be developed specifically for children in the early grades. Effectiveness of several possible sequences will be studied by observing small groups of children receiving the material in varying order; that is, pronunciation followed by comprehension, comprehension followed by pronunciation, or some method of integrating the two. At the end of 10 training sessions the children will be tested on their ability to understand and pronounce phrases from the lessons and to describe a series of pictures in French, using words of their own choice.

Evan R. Keislar, professor of educational psychology at the University of California, Los Angeles, will be principal investigator for the project. It is to be completed by October 4, 1964, and will cost a total of $33,930.

3. The University of Florida will study and evaluate the influences of certain auditory factors on pupils learning a foreign language. The pupils being studied will be enrolled in beginning French and Spanish courses.

The project calls for measuring various aspects of each student's hearing (pitch, loudness, rhythm, time, etc.) at the beginning and end of a semester's language study and relating the findings to other data such as orientation test scores, language experience, sociological background, and career goals. Purpose of the study is to ascertain whether these measures make it possible to predict a student's ease or difficulty in mastering French or Spanish, and to determine whether his auditory skills improve significantly after a period of studying either language.

Ralph R. Leutnegger, assistant professor of speech at the University of Florida, will direct the project, which began May 1, 1963, and is to be completed by September 1, 1963, at a cost of $3,335.

Educators confer on new media for teaching library science

A WORK-STUDY conference on the implications of the new media for the teaching of library science was held May 28–29 in Chicago. Approximately 70 library educators representing the 34 accredited American library schools, at least half of the unaccredited degree-granting library schools, and professional library organizations were invited to participate in the program.

Financed by a special U.S. Office of Education grant to the University of Illinois under title VII of the National Defense Education Act, the conference was under the general direction of the Media Research and Development Committee, Library Education Division, American Library Association. Coordinator for the conference was Harold Goldstein, professor of library science at the University of Illinois and chairman of the media research and development committee.

A final report of the conference will be published.

Other Program Notes

Research Grants for Arms Control and Disarmament

THE U.S. Arms Control and Disarmament Agency is awarding research grants or contracts to individuals, nonprofit organizations whose primary purpose is the conduct of research, and nonprofit institutions of higher education to support research in the field of arms control and disarmament.

Proposals may be submitted at any time. Principal elements considered in the awarding of a grant

are: the likely contribution of the work to a fund of theoretical and practical knowledge concerning arms control and disarmament, the qualifications of the principal investigator and other professional participants in the work, and the support required.

Requests for information should be addressed to the U.S. Arms Control and Disarmament Agency, Washington 25, D.C., Attention: Chairman, Research Council.

Public Health Service

Reports on research grants available

Three parts of a five-part series covering the various forms of financial assistance available from the Public Health Service are now available.

The series is entitled *Public Health Service Grants and Awards, Fiscal Year 1962. Part I—Research Projects; Part III—Construction of Cancer Research Facilities, Health Research Facilities, and Hospital and Medical Facilities;* and *Part IV—Health Services Formula and Project Grants* are available from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C., for $1.50, 25 cents and 25 cents per copy, respectively.

Grants and fellowships

During the first 9 months of fiscal year 1963, the Public Health Service awarded 12,456 research grants and 3,192 fellowships totaling $321,960,086.

The total includes funds for new grants, fellowships, and research career awards and for continuation of previously approved awards.

Atomic Energy Commission

Nuclear exhibit in Colombia

THE ATOMIC ENERGY COMMISSION's Latin American exhibit, "Atoms at Work," was on display in Bogotá, Colombia, from April 17 through May 16. Bogotá was the sixth Latin American capital to display the U.S. exhibit. The first showing was in Buenos Aires in the fall of 1960. Others were in Rio de Janeiro and Lima in 1961, and in Mexico City and Santiago in 1962.

The exhibit is designed to serve three purposes: To present a program which will aid the general public in understanding atomic energy and its benefits; to make available to the host country's scientists and engineers a portable laboratory equipped with an operating teaching reactor and other nuclear tools which they may use in work on projects with AEC scientific experts; and to provide a training school and seminar for college and high school science students and their teachers.

National Science Foundation

Report on college and university survey available

The National Science Foundation has released a final report on the findings of the survey, *Scientific Research and Development in Colleges and Universities—Expenditures and Manpower, 1958.* This is NSF's second survey of academic institutions; the first covered the year 1954.

For purposes of the survey, colleges and universities were divided into three broad organizational units: colleges and universities proper (including medical and engineering schools), agricultural experiment stations (including colleges of agriculture), and Federal contract research centers.

Copies are available from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C., for 70 cents each.

Fellowship awards

More than 2,200 college and university students will be aided in their graduate study in the sciences, mathematics, and engineering through two fellowship programs announced recently.

NSF awarded 1,300 cooperative graduate fellowships for the 1963–64 academic year, and 906 summer fellowships for graduate teaching assistants for study and research in the summer of 1963.

Inservice institutes in science and mathematics

The inservice institutes program of the National Science Foundation will provide opportunities for approximately 11,735 secondary school teachers; 1,403 elementary school teachers; and 73 college, junior college, and technical school teachers of science and mathematics to obtain supplemental training during the 1963–64 academic year.

Conducted by colleges and universities, the institutes are designed to help teachers to obtain additional knowledge of science and mathematics and to become acquainted with important new materials to improve course content. Some institutes grant credit toward a higher degree.

Information on applications should be obtained from the institutions, which will select the partici-

pants. To obtain the names of the institutions, write to the National Science Foundation, 1951 Constitution Avenue NW., Washington 25, D.C., for press release NSF–63–116.

Study of engineering education

The National Science Foundation has awarded a $307,190, 3-year grant to the American Society for Engineering Education (ASEE) to make a national survey of engineering schools' curriculums and the entire range of engineers' responsibility in government and industry.

The survey will be directed by Eric A. Walker, president of Penn State University, who will serve as project director of the overall study; George A. Hawkins, dean of engineering and the mathematical sciences, Purdue University, who will head a team of engineering professors to evaluate undergraduate engineering education; and Joseph M. Pettit, dean of engineering, Stanford University, who will direct an investigation of graduate education for engineers.

The survey will examine such topics as the degree of specialization in engineering education, a graduate program filling both the practical requirements of professional engineers and the academic needs of resident graduate students, the value of the campus environment, and the line of demarcation between science and engineering.

The ASEE has conducted two previous studies of engineering education—the first in 1929–34, and the second in 1952–55.

Records To Aid National Cultural Center

FOR THE FIRST TIME the music of the four major U.S. military bands—Army, Marine, Navy, and Air Force—have been recorded for sale to the public. The four souvenir albums have been made by RCA Victor Records, and all normal recording profits will be paid to the National Cultural Center. The Department of Defense provided the services of the four military bands, and all composers' and arrangers' fees and royalties have been waived in favor of the Center.

The albums are available at a manufacturer's nationally advertised list price of $3.98 in monaural versions and $4.98 in stereophonic versions. Organizations may acquire the records in bulk at special reduced prices. For details write the National Cultural Center, 1701 Pennsylvania Avenue NW., Washington 6, D.C.

Educational and Training Assistance to War Orphans

THE PEAK of the Veterans' Administration program providing educational and training assistance to war orphans is expected to be reached this year, according to a long-range VA survey recently released.

The survey estimates that nearly 24,000 children whose veteran parent died of a service-connected disability will take advantage of the benefit during 1963. In 1962, more than 20,500 took part. The survey revealed that the program is expected to drop slowly until the year 1985, when less than 300 war orphans are expected to be enrolled.

Information and applications forms are available from any VA office.

Manpower Development and Training Act

DURING January and February 1963, 250 training programs for 8,500 unemployed and underemployed people in 45 States were approved under the Manpower Development and Training Act (MDTA).

Since MDTA operations began in September 1962, a total of nearly 800 projects have been approved and 25,500 men, women, and young people out of school have been selected for training.

National Aeronautics and Space Admistration

Summer institute in space physics

FORTY science students from 30 colleges and universities will participate in the Columbia University Summer Institute in Space Physics, July 1–August 9.

The winners, from 18 States, were selected from 134 applicants in a nationwide competition. They will receive grants from Columbia with the support of the National Aeronautics and Space Administration. Grants cover tuition, an allowance of $60 a week, round-trip travel to New York City, and a field trip to NASA centers in Huntsville, Ala., Houston, Tex., Cape Canaveral, Fla., and Greenbelt, Md.

The summer program, established in 1962, is designed to train students of unusual ability in the areas of physical science which play an important role in space research.

THE PEACE CORPS

(*Continued from p. 6*)

antships to attract qualified returning Volunteers. The effect on the campuses to which they return will be most interesting to observe in a year or two.

Research on Peace Corps operations is underway and has been almost since its beginning. Results of the research have already made possible refinements in the selection, training, and oversea operations. Most of the research has been conducted under contract with selected colleges and universities. The research program is designed by the Division of Research to meet needs identified by the Peace Corps. The university oversea representative has a unique opportunity to conduct research in his own field of interest, provided it does not interfere with his duties under the contractual program.

The Peace Corps also utilizes faculty members as consultants to provide independent evaluation of its oversea operations. In this manner weaknesses in its total operation are quickly revealed and sound information is provided to the Peace Corps Director for appropriate action. When these weaknesses are related to university contract operations, the Peace Corps works cooperatively with the institution to take the necessary corrective action. Oversea representatives of institutions have already, in several cases, been returned from the field because of unsatisfactory performance. Quick action in these matters has made it possible to keep the morale of the Volunteers in the field at a high pitch and their work effective.

There appears to be a high demand for returning Peace Corps Volunteers. The Foreign Service of the State Department, U.S. Information Agency, Agency for International Development, industry, schools, colleges, and universities have all shown intense interest in them. The Peace Corps Division of Volunteer Support provides a channel for transmitting information about such opportunities to the Volunteers in the field. Although current legislation prohibits the Peace Corps from operating a placement service for the returning Volunteers, several other channels are available to assist them. The Carnegie Corporation recently provided an initial grant to the American Council on Education to assist Volunteers on their return in finding opportunities which would make maximum use of their experiences and which would meet their individual needs and interests. Institutions with oversea contracts already provide the facilities of their placement services to the Volunteers in their projects.

An unusual feature of the university oversea contract program is that the institution maintains a full record of performance of the Volunteers, including evaluation of their experience in academic terms. Thus, a returning Volunteer who desires to return for additional education at another institution can support his application with an academic transcript of record provided by the institution with which he has been associated in training and overseas. This greatly facilitates academic evaluation of his Peace Corps service experience for transfer of credit toward a degree program, waiver of prerequisites for advanced courses, or credit by examination. In most cases, however, returning Volunteers who served overseas without such arrangements will not have transcripts or other qualitative documentation in academic terms of their oversea experiences, yet they may have served in a manner entirely comparable to that of Volunteers who can obtain such documentation. A solution to this inequity is needed if major problems are to be avoided when approximately 400 returning Volunteers enter our colleges and universities in September 1963, and up to 1,800 by the following September. Recognition of Peace Corps teaching experience for certification in the various States poses similar problems.

The precedent established by the American Council on Education in the development of accreditation of service experiences of veterans of the Department of Defense agencies, as a service both to the veterans and to college admissions officers, offers hope for partial solution to this problem. The Peace Corps is in many ways a new type of educational program. Full realization of its educational potential will take even closer cooperation between the higher education community and the Peace Corps than they have achieved thus far. It will also depend greatly upon how the various institutions evaluate the Volunteers' experiences in academic terms. In this respect, a national academic body such as the American Council on Education can perform an essential service. Using its experiences with its Commission on Accreditation of Service Experiences, it could establish

national standards for the academic evaluation of the entire range of experiences of the Peace Corps Volunteers, including their U.S. training and their oversea service. Steps are being taken to develop such a program as a cooperative venture between the Peace Corps and the American Council on Education.

In summary, it may be said that a close working partnership has developed between the higher education community and the Peace Corps. This partnership serves both the long- and short-range purposes of both partners, and strengthens each. There remain, however, many areas in which the partnership can be further developed and strengthened. The Corps originally intended that a majority of its oversea programs would be decentralized in administration through contracts with colleges and universities, but administration of the programs is actually becoming more centralized. Only as the overall program matures will it be possible to determine whether or not the potentials of the partnership can be better realized through a highly centralized administration operation, or one in which a relatively small Peace Corps staff decentralizes its oversea operations through contracts with colleges and universities.

Colleges and universities, with a few notable exceptions, have not assumed the initiative in taking advantage of the opportunity to make the oversea operation an integral part of their developing programs in international education. The Peace Corps has opened the door to the possibilities, but few institutions have developed their international education plans sufficiently well to take advantage of them. At this stage, the Peace Corps has done as much as it can and therefore has little choice but to expand its oversea operations with its own personnel. There is still an opportunity for consideration of imaginative proposals from individual institutions or groups of institutions. It is now up to the higher education community to take the initiative.

The Peace Corps is off to a successful start. The Volunteers are having unparalleled experiences and the recipient countries are pleased to have them. A new generation of broadly educated and experienced people will soon be returning to the U.S. society in increasing numbers. Their impact on that society can be expected to be great. The impact on higher education will probably be the most significant of all. This presents both an opportunity and a challenge to higher education. The Peace Corps is anxious to assist, as a full partner with the higher education community, in utilizing this potential in the interests of peace, friendship, and mutual international understanding.

NEW PUBLICATIONS

Government Publications

How To Obtain

(*1*) *Cost Publications: Send request, enclosing remittance (check or money order), to the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.*

(*2*) *Free Publications: Request direct from the agency issuing them.*

From the Office of Education

Administration of Public Laws 874 and 815: Twelfth Annual Report of the Commissioner of Education, June 30, 1962. Report to the Congress. 1963. 167 p. $1. (OE–22003–62)

Distributive Education: A Guide to Practical Research, by Natalie Kneeland. 1963. 41 p. 20 cents. (OE–73011)

Education in Iran, by Abul H. K. Sassani. July 1962. 25 cents. (OE–14081)

Educational Data: Ecuador, by Adela R. Freeburger and Charles C. Hauch. February 1963. 11 p. Free. (OE–14034–64)

Educational Data: The Kingdom of Greece, by Abul H. K. Sassani. November 1962. 10 p. Free. (OE–14034–56)

Higher Education in Poland, Part 1: Organization and Administration, by Seymour M. Rosen and Nellie Apanasewicz. 1963. 37 p. 20 cents. (OE–14082)

Library Research in Progress, Number 8, by Henry T. Drennan, *ed.* March 1963. 18 p. Free. (OE–15005–8)

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Library Statistics of Colleges and Universities, 1961–1962: Institutional Data, by Theodore Samore and Doris C. Holladay. 1963. 172 p. $1. (OE–15032–62)

The Major Principles of the Biological Sciences of Importance for General Education, by W. Edgar Martin. December 1962. 34 p. 25 cents. (OE–29026–A)

Needed Research in the Teaching of English: Proceedings of a Project English Research Conference, by Erwin R. Steinberg. 1963. 134 p. 55 cents. (OE–30010)

Project English Newsletter, Issue No. 3. February 1963. 4 p. Free. (OE–30006–3)

Report of the Secretary of Health, Education, and Welfare to the Congress on Training Activities Under the Manpower Development and Training Act. A report on and evaluation of trainees and training programs, including the results of the vocational training survey. Feb. 28, 1963. 63 p. 55 cents. (OE–80027)

Selected Bibliography on Education in Southeast Asia, by Kenneth L. Neff. 1963. 16 p. 15 cents. (OE–14071)

Soviet Training Programs for Africa, by Seymour M. Rosen. 1963. 13 p. 15 cents. (OE–14079)

Statistics of State School Systems: 1959–60, by Carol Joy Hobson and Samuel Schloss. 1963. 108 p. 70 cents. (OE–20020–60)

Technology in American Education, 1650–1900: New Media for Instruction, 1, by Charnel Anderson. 1962. 53 p. 25 cents. (OE–34018)

Your National Defense Graduate Fellowship. Report on the National Defense Graduate Fellowship Program. Revised 1963. 8 p. Free. (OE–55031A)

From Other Government Agencies

Food for Peace: The Creative Use of America's Abundance in International Development. March 1963. 20 p. Free. Agency for International Development, Department of State, Washington 25, D.C.

Fundamental Nuclear Energy Research 1962: A Special Report of the United States Atomic Energy Commission. 1963. 405 p. $2.50.

Intramural Research Program. National Heart Institute. 1963. 17 p. 15 cents. U.S. Government Printing Office (PHS Publication No. 987).

In-Service Institutes for Teachers of Science and Mathematics, 1963–64. 1963. 30 p. Free. National Science Foundation, Washington 25, D.C.

Major Activities in the Atomic Energy Programs: January–December 1962. U.S. Atomic Energy Commission. January 1963. 599 p. $2.00. U.S. Government Printing Office.

National Institutes of Health. Revised 1963. 38 p. 1963. 35 cents. U.S. Government Printing Office (PHS Publication No. 81).

Proposed Mutual Defense and Assistance Programs, Fiscal Year 1964. Summary Presentation to the Congress. Agency for International Development and Department of Defense. April 1963. 184 p. 60 cents.

Scientific Research and Development in Colleges and Universities—Expenditures and Manpower, 1958. The National Science Foundation. 1963. 70 cents.

U.S. Government Grants Under the Fulbright-Hays Act: Program Announcements 1964–65, University Lecturing, Advanced Research: Latin America. March 1963. 29 p. Free. (Conference Board of Associated Research Councils, Committee on International Exchange of Persons, 2101 Constitution Avenue, Washington 25, D.C.)

U.S. GOVERNMENT PRINTING OFFICE:1963